DOCUMENTED CRITERIA FOR CAST RESTORATION PREPARATION

RATING/SCORE			FORM OF PREPARATION/REDUCTION	RETENTION	MARGIN & BEVEL FINISH	OPERATIVE ENVIRONMENT & PULPAL PROTECTION
P A S	HIGHLY SATISFACTORY (ideal or minor errors)	5	Appropriate extension for convenience and prevention. Appropriate occlusal/incisal reduction. Appropriate coronal/pulpal/axial reduction. Minor deviations allowable.	Parallelism is appropriate, no undercuts internally or externally. Appropriate taper for retention and withdrawal. Grooves and/or boxes are parallel, well defined and appropriate length and location. Minor deviations allowable.	Appropriate finish of walls and well defined angles. Margins and bevels appropriately placed, smooth and well defined. Minor deviations allowable.	No unnecessary trauma to simulated soft tissue. Free of debris. Minor deviations allowable.
	SATISFACTORY (slight errors)	4	Slight over/under extensions for convenience and prevention. Slight over/under occlusal/incisal reduction. Slight over/under coronal/pulpal/axial reduction.	Parallelism slightly compromised and slightly undercut internally. Slight imperfections in grooves and/or boxes. Slightly inadequate length of preparation.	Walls and line angles and/or margins slightly rough. Margins slightly under/over extended. Margins and bevels slightly deep, shallow or irregular.	Some debris present.
	MINIMALLY SATISFACTORY (moderate errors)	3	Moderate over/under extensions for convenience and prevention. Moderate over/under occlusal/incisal reduction. Moderate over/under coronal/pulpal/axial reduction.	Parallelism moderately compromised and moderate undercut internally. Moderate imperfections in grooves and/or boxes. Moderately inadequate length or preparation.	Walls and/or line angles and/or margins moderately rough. Margins moderately under or over extended. Margins and bevels moderately deep, shallow or irregular.	Moderate amount of debris present.
FAIL	UNSATISFACTORY (major errors)	2	Major over/under extensions for convenience and protection. Major over/under occlusal/incisal reduction. Major over/under coronal/pupal/axial reduction.	Major error in parallelism (inadequate or excessive). External undercut(s). Excessive taper. Grooves and/or boxes ill defined and/or improperly placed. Inadequate length of preparation to a major degree. Major internal undercut.	Major unnecessarily deep or inadequate margins and/or bevels. Margins excessively rough and/or poorly finished to a major degree. Margin barely in contact with adjacent tooth.	Major evidence of unnecessary trauma to simulated soft tissue. Mutilation of adjacent hard/or simulated soft tissue. Excessive debris present.
	HIGHLY UNSATISFACTORY (critical errors)	1	Critical over/under extension for convenience and protection. Critical over/under occlusal/incisal reduction. Critical over/under coronal/pulpal/axial reduction.	Critical error in parallelism (inadequate or excessive). External undercut(s). Critical excessive taper. Grooves and/or boxes lack definition or are improperly placed to a critical degree. Inadequate length of preparation. Critical internal undercut.	Critical unnecessarily deep or inadequate margins and/or bevels. Margins excessively rough and/or poorly finished to a critical degree. Margin in contact with adjacent tooth.	Critical evidence of unnecessary trauma to simulated soft tissue. Mutilation of adjacent hard/or simulated soft tissue. Critically excessive debris present.
	VERY UNSATISFACTORY (gross errors)	0	Gross over/under extensions for convenience and protection. Gross over/under occlusal/incisal reduction. Gross over/under coronal/pulpal/axial reduction. Gross lack of concept. An area of the prepared tooth contacts adjacent tooth.	Grossly tapered or extreme undercut. Complete lack of retention. Grooves and/or boxes demonstrate total lack of concept.	Total lack of definition of margins and/or bevels.	Gross mutilation of adjacent hard/and or simulated soft tissue.